

a square bar-micrometer. By this means I made comparisons on both mornings with star B.A.C., 3303. The transits were observed on opposite sides of the square, and are, therefore, not so satisfactory as I could wish. The following are the results corrected for differential refraction and the comet's proper motion.

	d	h	m	s	d	h	m	s
Windsor Mean Time, 1882, Sept. ...	8	17	54	52	9	17	49	45
Mean R.A. of Star, 1882.0 ...		9	33	49.76		9	33	49.76
Reduction to App. R.A. for date ...	+			1.84	+			1.86
Difference R.A. (Comet—Star) ...	+		3	15.90	+		11	56.19
Apparent R.A. of Comet ...		9	37	7.50		9	45	47.81
Mean N.P.D. of Star 1882.0 ...		90°	36'	27".6		90°	36'	27".6
Reduction to App. N.P.D. for date ...	+			10.8	+			10.7
Difference N.P.D. (Comet—Star) ...	+		21	8.0	+		16	57.9
Apparent N.P.D. of Comet ...		90	57	46.4		90	53	36.2
Log. Factor for Parallax in R.A. ($\frac{p}{P}$)				−8.7115				−8.7187
Log. Factor for Parallax in N.P.D. ($\frac{q}{P}$)				+9.7365				+9.7370
Number of Comparisons ...				4				2

The star's mean place has been deduced from the following authorities:—Schjellerup, Radcliffe Observations, 1858, and *Annales de l'Observatoire Royal de Bruxelles*, Cat. 1874. Up to the present time no further observations could be made, in consequence of fog and cloud, but as the comet is fast approaching conjunction with the Sun, it is probable that it will be visible in the evenings in the west.

Windsor, N. S. Wales:
1882, Sept. 15.

Observations of the Great Comet (b), 1882. By A. V.
Nursing Row.

A comet is now visible in the eastern heavens before sunrise, and is so conspicuous to the naked eye as to attract general attention. It presents a bright planetary disk, surrounded by nebulosity. On applying higher magnifiers this appearance vanishes, the centre of the head not being occupied by a star-like point.

The head has a border of light surrounding it on the side towards the Sun, and continued round on each side of the tail.

The disk has been undergoing changes of form and apparent diameter for twelve days. The length of the bright part of the tail is between 7° and 8°, above which are narrow rays or streaks of light extending more than 12°—concave towards the south,

and shaped like the tusk of an elephant, the thick part being at the greatest altitude. Observing the comet with the naked eye at the seaside the whole tail took nearly an hour to rise.

Oct. 7.—In telescopic observations some vibration was observed at the head, and for some portion of the tail near the head for only a few seconds. This, we first thought, was owing to some irregular shaky motion of the equatorial, and closely examined the instrument. It was, however, found to be all right, being driven by clockwork, and no accident could be traced in the going of the instrument. The condition of the atmosphere was unusually fine and clear, and no wind. This morning the declination of the comet was 11° nearly; right ascension, $10^{\text{h}} 16^{\text{m}} 31^{\text{s}}$ nearly. Approximate daily variation deduced from the observations—in right ascension, $3^{\text{m}} 5^{\text{s}}$; in declination, $+34'.5$ or $+35'$ nearly.

Our Hindoo astronomers predicted the appearance of a comet in the southern hemisphere in their printed calendar for the present year. As to the identity, they gave no other particulars except that it would possess a bright copper colour like the rising moon, and a long tail. The name given by them to their predicted comet is “Silpacam.”

*Observatory, Daba Gardens,
Vizagapatam:
1882, Oct. 8.*

Elements of the Orbit of Comet 1881 III. (Schäberle).
By Henry T. Vivian.

From the three positions of Comet III., 1881, observed by Mr. Tebbutt, Sept. 20 and 29, and Oct. 8 (*Monthly Notices*, vol. xlii., p. 263), I have computed the following parabolic elements:—

$$\begin{aligned} T &= 1881, \text{ August } 22.4093, \text{ G.M.T.} \\ \pi &= 334^{\circ} 56' 47'' \left. \begin{array}{l} \text{Apparent Equinox,} \\ 1881, \text{ Sept. } 29. \end{array} \right\} \\ \Omega &= 97^{\circ} 11' 49'' \\ i &= 39^{\circ} 37' 1'' \\ \log q &= 9.8015958 \end{aligned}$$

Motion retrograde.

A comparison with the middle place (computed—observed) gave—

$$\Delta L = +3''.8; \quad \Delta l = -12''.2.$$

The observations were corrected for aberration, and the longitude of Windsor was taken from the *Nautical Almanac* for the year.

London: 1882, Nov. 2.

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